

**REMARKS**

In the Office Action mailed on March 16, 2007, the Examiner allowed claims 2-20 and rejected claims 21-30. In particular, claims 21-30 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter and under § 103(a) as being obvious over U.S. Patent No. 6,119,098 to *Guyot et al.* in view of U.S. Patent No. 6,006,197 to *d'Eon et al.* By this Amendment, Applicants have amended claim 21. Claims 2-30 remain pending.

*Section 101 Rejections*

Claims 21-30 were rejected under 35 U.S.C. § 101. In particular, the Examiner argued that the claims “fail[] to produce a useful, concrete, and tangible result, such as storing the uncertainty of the click probability estimate or displaying an advertising based on the uncertainty of the click probability estimate.” (Office Action, p. 3.) Applicants respectfully disagree.

First, contrary to the Examiner’s statement, claims 24, 26, 27, 28, 29, and 30 recite, either directly or indirectly, “presenting the Internet advertisement to the customer.” Even if the Examiner is correct that an action such as “storing” or “displaying” is required to comply with section 101 (which Applicants do not agree is the case), claims 24, 26, 27, 28, 29, and 30 meet that requirement because they recite “presenting” the Internet advertisement to the customer.

Furthermore, the Office’s Interim Guidelines for Examination of Patent Applications for Statutory Subject Matter Eligibility explain that “the tangible requirement does require that the claim must recite more than a § 101 judicial exception, in that the

process must set forth a practical application of that § 101 judicial exception to produce **a real-world result**....In other words, **the opposite meaning of ‘tangible’ is ‘abstract.’**” Interim Guidelines for Examination of Patent Applications for Statutory Subject Matter Eligibility, p. 21.

As set forth in the Interim Guidelines, all of claims 21-30 recite methods that produce tangible results. In the *State Street Bank* case, the Federal Circuit held that the tangible result of a process applying a mathematical algorithm was statutory because it resulted in “a final share price momentarily fixed for recording and reporting purposes.” *State Street Bank & Trust Co.*, 149 F.3d 1373. Similarly, the computer-implemented methods recited in claims 21 and 25 produce useful, concrete, and tangible results, e.g., a click probability estimate that is used to determine whether to present an Internet advertisement to a customer. The methods of claims 21 and 25 also produce, e.g., an established customer profile for a customer and an adjusted uncertainty of the click probability estimate.

All of these results are “real world” and not abstract. Because claims 21-30 recite computer-implemented methods that produce useful, concrete, and tangible results, Applicants request the withdrawal of the section 101 rejections of claims 21-30.

#### *Section 103 Rejections*

Claims 21-30 were rejected under 35 U.S.C. § 103(a) as being obvious over *Guyot et al.* in view of *d'Eon et al.* To establish a *prima facie* case of obviousness under 35 U.S.C. § 103(a), the references, taken alone or combined, must teach or suggest each and every element recited in the claims. M.P.E.P. § 2143.03 (8<sup>th</sup> ed. 2001, revised

August 2005). Moreover, “in formulating a rejection under 35 U.S.C. § 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed.” *USPTO Memorandum* from Margaret A. Focarino, Deputy Commissioner for Patent Operations, May 3, 2007, p. 2. “[T]he analysis supporting a rejection ... should be made explicit” and it is “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements in the manner claimed.” *Id.* (citing *KSR Int’l Co. v. Teleflex, Inc.*, No. 04-1350 (U.S. Apr. 30, 2007)).

A *prima facie* case of obviousness has not been established because, among other things, none of the cited art, nor any obvious variant thereof, taken alone or in any reasonable combination, discloses or suggests each and every element of Applicants’ claims 21-30.

Claim 21, as amended, recites a computer-implemented method for selecting Internet advertisements for presentation comprising, among other things, determining an uncertainty of the click probability estimate based at least in part on a number of times the Internet advertisement has been previously presented, and after the Internet advertisement has been presented to the customer, reducing the uncertainty of the click probability estimate. *Guyot et al.* and *dEon et al.*, taken alone or together, fail to teach or suggest this subject matter.

The Examiner has acknowledged that *Guyot et al.* does not disclose determining an uncertainty of the click probability estimate based at least in part on a number of

times the Internet advertisement has been previously presented. (Office Action, p. 4.)

Thus, *Guyot et al.* also does not disclose reducing the uncertainty of the click probability estimate, after the Internet advertisement has been presented to the customer. In the Office Action, the Examiner argued that *d'Eon et al.* discloses “determining a conditional probability of a subsequent action by the user, which is drawn to the uncertainty of the click probability.” (Office Action, p. 4). However, contrary to the Examiner’s description, *d'Eon et al.* does not mention a “conditional probability of a subsequent action by the user” at all. Instead, the reference describes “indications of the effectiveness of the advertisement” that include “an average revenue value [that] is correlated to the number of impressions associated with the advertisement” and “an advertisement cost value [that] is correlated to the number of impressions associated with the advertisement.” (*d'Eon et al.*, col. 3, ll. 12-16.)

*d'Eon et al.*, taken alone or in combination with *Guyot et al.*, does not teach determining **an uncertainty of the click probability estimate based at least in part on a number of times the Internet advertisement has been previously presented.** Even if the “average revenue value” or the “advertisement cost value” of the reference could be interpreted as teaching a click probability estimate (which Applicants do not admit), nothing in the reference suggests that these values teach an uncertainty of the click probability estimate.

Furthermore, there is no teaching or suggestion in *d'Eon et al.* of **reducing the uncertainty of the click probability estimate** after the Internet advertisement has been presented to the customer. At most, the reference explains using “user

identifications to correlate impressions of the advertisement to post-impression transactional activity undertaken by the user computers as an indication of the effectiveness of the advertisements.” (*d'Eon et al.*, col. 3, ll. 40-46.)

Thus, neither *Guyot et al.* nor *d'Eon et al.*, nor any obvious variant thereof, teach or suggest all of the elements of amended claim 21. Even if the references could be combined as the Examiner suggests (which Applicants do not admit), the resulting combination would not render claim 21 and its dependent claims obvious. Therefore, Applicants request the withdrawal of the section 103 rejection of claim 21 and its dependent claims 22-24.

Claim 25 recites a computer-implemented method for optimizing Internet advertising selection comprising, among other things, “establishing an advertisement profile for each of a plurality of advertisements, each advertisement profile including an expected revenue based on potential placement of the corresponding advertisement and a measure of uncertainty based at least in part on a number of times the corresponding advertisement has been placed.” Claim 25 further recites, “after a selected advertisement has been presented to the customer, reducing the measure of uncertainty corresponding to the selected advertisement.”

*Guyot et al.* and *d'Eon et al.*, taken alone or together, fail to teach or suggest this subject matter. The Examiner has acknowledged that *Guyot et al.* does not disclose an advertisement profile including an expected revenue based on potential placement of the corresponding advertisement and a measure of uncertainty based at least in part on a number of times the corresponding advertisement has been placed. (Office Action, p.

6.) Thus, *Guyot et al.* also does not disclose, after a selected advertisement has been presented to the customer, reducing the measure of uncertainty corresponding to the selected advertisement.

In the Office Action, the Examiner argued that *d'Eon et al.* discloses “determining a conditional probability of a subsequent action by the user, which is drawn to the uncertainty of the click probability.” (Office Action, p. 4). However, contrary to the Examiner’s description, *d'Eon et al.* does not mention a “conditional probability of a subsequent action by the user” at all. Instead, the reference describes “indications of the effectiveness of the advertisement” that include “an average revenue value [that] is correlated to the number of impressions associated with the advertisement” and “an advertisement cost value [that] is correlated to the number of impressions associated with the advertisement.” (*d'Eon et al.*, col. 3, ll. 12-16.)

*d'Eon et al.*, taken alone or in combination with *Guyot et al.*, does not teach an advertisement profile including an expected revenue based on potential placement of the corresponding advertisement and **a measure of uncertainty based at least in part on a number of times the corresponding advertisement has been placed**. Even if the “average revenue value” or the “advertisement cost value” of the reference could be interpreted as teaching an expected revenue (which Applicants do not admit), nothing in the reference suggests that these values teach are based on a measure of uncertainty.

Furthermore, there is no teaching or suggestion in *d'Eon et al.* of, after a selected advertisement has been presented to the customer, **reducing the measure of uncertainty corresponding to the selected advertisement**. At most, the reference

explains using "user identifications to correlate impressions of the advertisement to post-impression transactional activity undertaken by the user computers as an indication of the effectiveness of the advertisements." (*d'Eon et al.*, col. 3, ll. 40-46.)

Thus, neither *Guyot et al.* nor *d'Eon et al.*, nor any obvious variants thereof, teach or suggest all of the elements of claim 25. Thus, even if the references could be combined as the Examiner suggests (which Applicants do not admit), the resulting combination would not render claim 25 and its dependent claims obvious. Therefore, Applicants request the withdrawal of the section 103 rejection of claim 25 and its dependent claims 26-30.

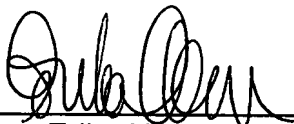
In view of the foregoing amendments and remarks, Applicants respectfully request the reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: September 17, 2007

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